

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-13 (canceled).

Claim 14 (new) A method for producing laser radiation comprising the steps of:

- (a) arranging a frequency conversion crystal in a first of two possible directions for frequency conversion and measuring a first output power of the converted radiation,
- (b) arranging the frequency conversion crystal in the second of the two possible directions for frequency conversion and measuring a second output power of the converted radiation,
- (c) determining a preferred beam path direction of a frequency conversion crystal by determining the direction which results in a higher output power of the converted radiation, and
- (d) amplifying radiation of an optical pumping source by using an optical cavity having at least one frequency conversion crystal disposed such that said crystal is passed by the radiation only in the predetermined preferred beam path direction.

Claim 15 (new) A method for producing laser radiation comprising the steps of:

- (a) providing an optical pumping source for producing optical pumping radiation;
- (b) providing a ring cavity comprising a frequency conversion crystal, a prism and mirror arrangement,
- (c) arranging the frequency conversion crystal in a first of two possible directions for frequency conversion and measuring a first output power of the converted radiation,
- (d) arranging the frequency conversion crystal in the second of the two possible directions for frequency conversion and measuring a second output power of the converted radiation,
- (e) determining a preferred beam path direction of a frequency conversion crystal by determining the direction which results in a higher output power of the converted radiation, and
- (f) amplifying radiation of an optical pumping source by using an optical cavity having at least one frequency conversion crystal disposed such that said crystal is passed by the radiation only in the predetermined preferred beam path direction.

Claim 16 (new): The method for producing laser radiation according to claim 15, further comprising the steps of:
providing coupling optics disposed between an optical pumping source and a ring cavity.

Claim 17 (new): The method for producing laser radiation according to claim 16, wherein the ring cavity is an external resonant unidirectional cavity.

Claim 18 (new): The method for producing laser radiation according to claim 17, wherein frequency conversion crystal is a Brewster-cut Beta-Borium Borate (b - BaB₂O₄ or BBO) crystal or a Lithium Triborate (LiB₃O₅ or LBO) crystal.

Claim 19 (new): The method for producing laser radiation according to claim 18, further comprising the step of providing a stage amplifier.

Claim 20 (new): The method for producing laser radiation according to claim 16, further providing the step of connecting the prism to a piezoelectric element.